

WHAT IS CLAIMED IS:

1. A charging member for being contactably disposed to an image bearing member and being supplied with a bias voltage, comprising:

5 a resistance layer having an ionic electrical conductivity,

wherein said resistance layer comprises a foamed elastic member and satisfies the following relationships:

10  $B \leq (5/3) \times A - 0.3$ , and

$B \geq 0.6$ ,

wherein A represents a surface bubble-containing density measured, in a state that air bubbles are attached to the surface of said resistance layer, by immersion method according to JIS Z 8807; and B represents a surface bubble-deaerated density measured, in a state that said air bubbles are removed from the surface of said resistance layer, by immersion method according to JIS Z 8807.

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2. A member according to Claim 1, wherein said resistance layer has a volume resistivity of not less than  $1 \times 10^6$  ohm.cm and not more than  $1.0 \times 10^{10}$  ohm.cm, measured in an environment of a temperature of 23 °C and a relative humidity of 50 %.

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3. A member according to Claim 1, wherein said

resistance layer has a volume resistivity of not less than  $1 \times 10^7$  ohm.cm and not more than  $1.0 \times 10^9$  ohm.cm, measured in an environment of a temperature of  $23^\circ\text{C}$  and a relative humidity of 50 %.

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4. A member according to Claim 1, wherein said resistance layer satisfies the following relationship:

$$0.6 \leq B \leq 0.75.$$

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5. A member according to Claim 1, wherein said resistance layer satisfies the following relationship:

$$A + 0.02 \leq B \leq (5/3) \times A - 0.3.$$

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6. A member according to Claim 1, wherein said charging member abuts against the image bearing member at an abutting pressure of not less than  $2.5 \times 10^3$  Pa and not more than  $3.0 \times 10^5$  Pa.

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7. A member according to Claim 1, wherein said charging member abuts against the image bearing member at an abutting pressure of not less than  $7.5 \times 10^3$  Pa and not more than  $2.0 \times 10^5$  Pa.

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8. A member according to Claim 1, wherein said charging member further comprises a core metal on

which said resistance layer is disposed, said resistance layer having a thickness of not less than 4.5 mm.

5           9.    A member according to Claim 1, wherein said charging member further comprises a core metal on which said resistance layer is disposed, said resistance layer having a thickness of not less than 6.0 mm.

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          10.   A member according to Claim 1, wherein said resistance layer comprises a foamed elastic member having a closed cell.

15           11.   An image forming apparatus, comprising:  
              image forming means for forming an image on  
              an image bearing member, and  
              a transfer member for being contactably  
              disposed to the image bearing member and transferring  
20    the image formed on the image bearing member by  
              applying a bias voltage to said transfer member;  
              wherein said transfer member comprises a  
              resistance layer having an ionic electrical  
              conductivity, said resistance layer comprising a  
25    foamed elastic member and satisfying the following  
              relationships:

$$B \leq (5/3) \times A - 0.3, \text{ and}$$

$$B \geq 0.6,$$

wherein A represents a surface bubble-containing density measured, in a state that air bubbles are attached to the surface of said resistance layer, by immersion method according to JIS Z 8807; and B represents a surface bubble-deaerated density measured, in a state that said air bubbles are removed from the surface of said resistance layer, by immersion method according to JIS Z 8807.

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12. An apparatus according to Claim 11, wherein said resistance layer has a volume resistivity of not less than  $1 \times 10^6$  ohm.cm and not more than  $1.0 \times 10^{10}$  ohm.cm, measured in an environment of a temperature of 23 °C and a relative humidity of 50 %.

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13. An apparatus according to Claim 11, wherein said resistance layer has a volume resistivity of not less than  $1 \times 10^7$  ohm.cm and not more than  $1.0 \times 10^9$  ohm.cm, measured in an environment of a temperature of 23 °C and a relative humidity of 50 %.

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14. An apparatus according to Claim 11, wherein said resistance layer satisfies the following relationship:

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$$0.6 \leq B \leq 0.75.$$

15. An apparatus according to Claim 11, wherein said resistance layer satisfies the following relationship:

$$A + 0.02 \leq B \leq (5/3) \times A - 0.3.$$

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16. An apparatus according to Claim 11, wherein said transfer member abuts against the image bearing member at an abutting pressure of not less than  $2.5 \times 10^3$  Pa and not more than  $3.0 \times 10^5$  Pa.

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17. An apparatus according to Claim 11, wherein said transfer member abuts against the image bearing member at an abutting pressure of not less than  $7.5 \times 10^3$  Pa and not more than  $2.0 \times 10^5$  Pa.

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18. An apparatus according to Claim 11, wherein said transfer member further comprises a core metal on which said resistance layer is disposed, said resistance layer having a thickness of not less than 4.5 mm.

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19. An apparatus according to Claim 11, wherein said transfer member further comprises a core metal on which said resistance layer is disposed, said resistance layer having a thickness of not less than 6.0 mm.

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20. An apparatus according to Claim 11, wherein  
said resistance layer comprises a foamed elastic  
member having a closed cell.

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